PATENT

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Claims:

1. An apparatus for cleaning an interior of a microwave oven comprising:

an enclosure disposed at least partially around at least one microwave-safe

material for effecting a cleaning process;

an outlet disposed on the enclosure; and

a cleaning solution comprising a surfactant and compatible with food

preparation in fluid communication through the outlet to the interior of the microwave

oven.

2. The apparatus of claim 1, wherein the at least one microwave-safe material is

selected from the group consisting of sponge, cloth, paper, paper towel, shammy

and combinations thereof.

3. The apparatus of claim 2, wherein the enclosure comprises at least one

material selected from the group consisting of plastic, paper, cardboard, glass,

microwave-safe materials and combinations thereof.

4. The apparatus of claim 3, wherein the enclosure is deformable to enable the

cleaning solution in fluid communication with the interior of the microwave oven.

5. The apparatus of claim 1, wherein the cleaning solution further comprises at

least one component selected from the group consisting of water, emulsifier,

fragrance, antibacterial agent and combinations thereof.

6. The apparatus of claim 5, wherein the surfactant has a concentration in a

range from about 0.5% to about 50%.

7. The apparatus of claim 5, wherein the fragrance is selected from the group

consisting of lemon, citrus or pine.

11

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An apparatus for cleaning an interior of a microwave oven comprising: 8.

an enclosure disposed at least partially around a surfactant solution

compatible with food preparation;

an outlet on the enclosure wherein the surfactant solution is in fluid

communication to the interior of the microwave oven; and

a cleaning material for effecting a cleaning process.

9. The apparatus of claim 8, wherein the cleaning material is selected from the

group consisting of sponge, cloth, paper, paper towel, shammy and combinations

thereof.

10. The apparatus of claim 8, wherein the enclosure comprises at least one

material selected from the group consisting of plastic, paper, cardboard, glass,

microwave-safe materials and combinations thereof.

11. The apparatus of claim 10, wherein the enclosure is deformable to enable the

surfactant solution in fluid communication with the interior of the microwave oven.

12. The apparatus of claim 10, wherein the surfactant solution comprises at least

one component selected from the group consisting of water, surfactant, emulsifier,

fragrance, antibacterial agent and combinations thereof.

13. The apparatus of claim 12, wherein the surfactant has a concentration in a

range from about 0.5% to about 50%.

14. The apparatus of claim 12, wherein the fragrance is selected from the group

consisting of lemon, citrus or pine.

15. A method for cleaning an interior of a microwave oven using a cleaning

apparatus comprising a cleaning material and an enclosure containing an outlet and

a surfactant solution, comprising:

12

heating the cleaning apparatus with microwave energy for a period to evaporate a portion of the surfactant solution to form a vapor;

emitting the vapor from the enclosure through the outlet;

condensing at least a portion of the vapor onto the interior;

maintaining the microwave oven for a second period to hydrate a residue adhered to the interior; and

removing the residue from the interior with the cleaning material.

- 16. The method of claim 15, wherein the period and the second period are each about 5 minutes.
- 17. The method of claim 15, wherein the cleaning material is selected from the group consisting of sponge, cloth, paper, paper towel, shammy and combinations thereof.
- 18. The method of claim 17, wherein the surfactant solution comprises at least one component selected from the group consisting of water, surfactant, emulsifier, fragrance, antibacterial agent and combinations thereof.
- 19. The method of claim 18, wherein the surfactant has a concentration in a range from about 0.5% to about 50%.
- 20. The method of claim 15, wherein deforming the enclosure enables vapor delivery into the microwave oven.